

AMENDMENTS TO THE CLAIMS

The text of all pending claims, including withdrawn claims, is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claims 4, 9, 16, and 21 without prejudice or disclaimer. Please AMEND claims 1, 6, 10, 11, 17, and 22 to read as follows:

1. (CURRENTLY AMENDED) An apparatus for setting an offset in a DVD player, comprising:

an offset measuring unit which measures one or more offset parameters for initial reproducing operations of the DVD player; and

an offset setting unit which, when the offset measuring unit measures the one or more offset parameters a number of times, calculates an average value of the measured offset values of the one or more offset parameters and sets, for each of the one or more offset parameters, the average value as a set offset value of the DVD player,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.

2. (ORIGINAL) The apparatus of claim 1, further comprising a counter which counts the number of times the one or more offset parameters are measured to determine the number of times the one or more offset parameters are measured.

3. (ORIGINAL) The apparatus of claim 1, further comprising a storage unit which stores the set offset value of each of the one or more offset parameters.

4. (CANCELLED)
5. (ORIGINAL) The apparatus of claim 1, wherein the set offset values are used as reference offset values during a subsequent initial reproducing operation of the DVD player.
6. (CURRENTLY AMENDED) A method of setting an offset in a DVD player, comprising:
 - measuring one or more offset parameters for initial reproducing operations of the DVD player;
 - calculating an average value for each of the measured offset values of the one or more offset parameters, when a number of times the one or more offset parameters are measured is the same as a reference number; and
 - setting, for each of the one or more offset parameters, the average value as a set offset value of the DVD player,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.
7. (ORIGINAL) The method of claim 6, further comprising of storing the set offset value of each of the one or more offset parameters.
8. (ORIGINAL) The method of claim 6, wherein the set offset values of the one or more offset parameters are used as reference offset values during a subsequent initial reproducing operation of the DVD player.
9. (CANCELLED)
10. (CURRENTLY AMENDED) A computer readable medium encoded with processing instructions for implementing a method of setting an offset in a DVD player, the

method comprising:

measuring one or more offset parameters for initial reproducing operations of the DVD player;

calculating an average value of the measured offset values for each of the measured offset parameters; and

setting, for each of the measured offset parameters, the average value as set offset value,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.

11. (CURRENTLY AMENDED) An apparatus for adjusting an offset in a DVD player, comprising:

an offset setting unit which measures one or more offset parameters a number of times, calculates an average value of each of the measured offset values of each of the measured offset parameters, and sets the average values as reference offset values for each of the measured offset parameters; and

an offset adjusting unit which compares newly-measured offset values for each of the one or more offset parameters with the reference offset value for the one or more offset parameters and adjusts the reference offset values to the newly-measured offset values if the values differ,

wherein the newly-measured offset values are measured during a subsequent initial reproducing operation of a DVD player,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is

included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.

12. (ORIGINAL) The apparatus of claim 11, further comprising a storage unit which stores the reference offset values.

13. (ORIGINAL) The apparatus of claim 11, wherein the offset setting unit further comprises:

an offset measuring unit which measures the one or more offset parameters for initial reproducing operations of the DVD player;

a counter which counts a number of times the one or more offset parameters are measured; and

an operation unit which, when the offset measuring unit measures the one or more offset parameters a reference number of times, calculates an average value of the measured offset values for each of the one or more offset parameters, and sets the average value as the reference offset value for each of the one or more offset parameters of the DVD player.

14. (ORIGINAL) The apparatus of claim 11, wherein the offset adjusting unit comprises:

a comparator which compares, for each of the one or more offset parameters, the offset values, which are measured during initial reproducing operations of the DVD player, with the reference offset value; and

an offset adjuster which, based on a comparison result of the comparator for each of the one or more offset parameters, adjusts the reference offset value to the newly-measured offset value when the newly-measured offset value is different from the reference offset value,

wherein the newly-measured offset values are measured during a subsequent initial reproducing operation of the DVD player.

15. (ORIGINAL) The apparatus of claim 11, wherein, when an error related to the offset occurs during reproducing operations of the DVD player, adjustment of an offset in the DVD player is repeated.

16. (CANCELLED)

17. (CURRENTLY AMENDED) A method of adjusting an offset in a DVD player, comprising:

setting reference offset values for one or more offset parameters by measuring the one or more offset parameters a number of times, calculating an average value of the measured offset values for each of the one or more offset parameters, and setting the average values as reference offset values; and

adjusting the reference offset values to newly-measured offset values by comparing the newly-measured offset values, which are newly-measured during a subsequent initial reproducing operation of the DVD player, with the reference offset values, and adjusting the reference offset values to the newly-measured offset values,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.

18. (ORIGINAL) The method of claim 17, wherein the setting of the reference offset values further comprises:

measuring an offset value of each of the one or more offset parameters for every initial reproducing operation of the DVD player;

calculating an average value of the measured offset values of the one or more offset parameters when a number of times the one or more offset parameters are measured is the same as a reference number;

setting the average value of each of the one or more offset parameters as the reference offset value for each of the one or more offset parameters; and

storing the average values.

19. (ORIGINAL) The method of claim 17, wherein the adjusting of the offset value comprises:

comparing the newly-measured offset value of each of the one or more offset parameters with the reference offset value of each of the one or more offset parameters; and

adjusting, based on a comparison result from the comparing, the reference offset value of each of the one or more offset parameters to the newly-measured offset value of each of the one or more offset parameters when the newly-measured offset value is different from the reference offset value, the newly-measured offset value being measured during a subsequent initial reproduction operation of the DVD player.

20. (ORIGINAL) The method of claim 17, wherein, when an error related to the offset occurs during reproducing operations of the DVD player, the adjustment of the offset value in the DVD player is repeated.

21. (CANCELLED)

22. (CURRENTLY AMENDED) A computer readable medium encoded with processing instructions for implementing a method of adjusting an offset in a DVD player, the method comprising:

setting reference offset values for one or more offset parameters by measuring the one or more offset parameters a number of times, calculating an average value of the measured offset values for each of the one or more offset parameters, and setting the average values as the reference offset values of the one or more offset parameters; and

adjusting the reference offset values to newly-measured offset values by comparing the newly-measured offset values, which are newly-measured during a subsequent initial reproducing operation of the DVD player, with the reference offset values, and adjusting the reference offset values to the newly-measured offset values,

wherein the one or more offset parameters correspond to a sum signal, a position adjustment value of a focus lens, a constant linear velocity (CLV) adjustment value, and a variation adjustment value of an optical disc, and

wherein the sum signal is a sum of signals A, B, C, and D, which signals are discrete voltages output by a photo diode (PD) based on amounts of reflected laser light from the optical disc received by portions of the PD in an optical pickup of the DVD player, the focus lens is included in the optical pickup, and the CLV adjustment value is used to determine the rotational velocity at which to rotate the optical disc.